WHAT IS CLAIMED IS

1.   A method for use in transmission of audio signals over an IP network for coordinating the synchronous operation of a pair of interconnected audio encoder and audio decoder implementing at least one audio algorithm, by transmitting a message indicating that a synchronous reset of said audio algorithm is required.

2.   A method according to Claim 1, wherein said at least one audio algorithm is an algorithm having built-in silence suppression.

3.   A method according to Claim 1, operative in at least one of the following events:

      i.   a new communication link between the encoder and decoder is established;

      ii.   a link failure condition;

      iii. a pre-defined period of time has lapsed since a previous synchronous reset took place provided event (i) and (ii) have not occurred within this pre-determined period of time.

4.   A method according to Claim 1, wherein the coordination of the synchronous operation of said audio encoder and said audio decoder is done by resetting said audio algorithm currently operative to its pre-defined values.

5. A method according to Claim 3 wherein said audio algorithm is a member selected from a group comprising: G.723.1, G.729, G.729A, GSM full rate, GSM half rate and GSM enhanced rate.

6. A method according to Claim 1, comprising:

i.   establishing a path for a communication transmission;

ii.   preventing the encoder from transmitting traffic information for a first pre-defined period of time;

iii. adjusting the encoder audio algorithm currently operative to its pre-defined values during said first pre-defined period of time;

iv.   transmitting towards the decoder at least one message for synchronous reset during said first pre-defined period of time;

v.   following the receipt of said at least one message for synchronous reset, adjusting the decoder audio algorithm currently operative to its pre-defined values; and

vi.   allowing the encoder to re-process and re-transmit a new traffic information type of transmission after said first pre-defined period of time has lapsed.

6. A method according to Claim 5, further comprising:

> vii. in response to the receipt of said at least one message for synchronous reset by the decoder, transmitting an acknowledgement towards the encoder end;

> viii. repeating steps (iv) to (vii) in the event that this acknowledgment is not received within a second pre-defined period of time at the encoder's end.

7. A method according to Claim 1, wherein said message for synchronous reset is a message transmitted using RTP packets.

8. A method according to Claim 1, wherein said message for synchronous reset is initiated at the decoder end of the network.

9. An encoding/decoding device provided with means of implementing at least one audio algorithm, said encoding/decoding device is adapted for transmission of audio signals over an IP network, and is capable of resetting said at least one audio algorithm to its initial pre-defined values in response to a synchronous reset message received by a receiver associated therewith.

10. A device according to Claim 9, wherein said at least one audio algorithm is an algorithm having built-in silence suppression.

11. A system adapted for transmission of audio signals over an IP network, comprising at least one pair of interconnected compressing/decompressing devices one of which is operative as an audio encoder and the other as an audio decoder and at least one message transmitter capable of transmitting a synchronous reset message, wherein said audio encoder is reset along with the transmission of said synchronous reset message and wherein said audio decoder is reset in response to receiving said synchronous reset message.